

Hobbies

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How to make a simple spring-operated PIN TABLE

THIS pin-table is a game which when made is a constant and ever-ready source of amusement. There is nothing to go wrong and it is fitted with a second panel beneath the top table so the balls (marbles are the best substitutes for ball-bearings) after falling through the holes run down into five different scoring compartments at the front of the table.

Marbles not falling through the holes run on to the triangular shaped piece of wood at the front of the table and are guided into the fifth compartment, next to the spring plunger.

As will be seen, each compartment is marked with a score, so that at the end of the game the total is easily counted up and the marbles are simply collected from the compartments for re-play.

Everyday Material

This pin-table has been constructed with full realisation of the prevailing shortages of wood, and is easily and quickly built. The first thing to do is to cut from any discarded wooden box made of wood about $\frac{1}{4}$ in. in thickness, two pieces of wood as shown at H, also one piece as J and K in Fig. 1.

The top of the table (Fig. 2) can be made from a sheet of ply wood, but as only very few readers are fortunate enough to possess any, lengths of

box-wood may be used. About three thin planks are required according to their width, and on completion, the table top should have a layer of lino tacked over it if available. The lino is not, of course, necessary if a sheet of three-ply is obtainable.

The Table Top

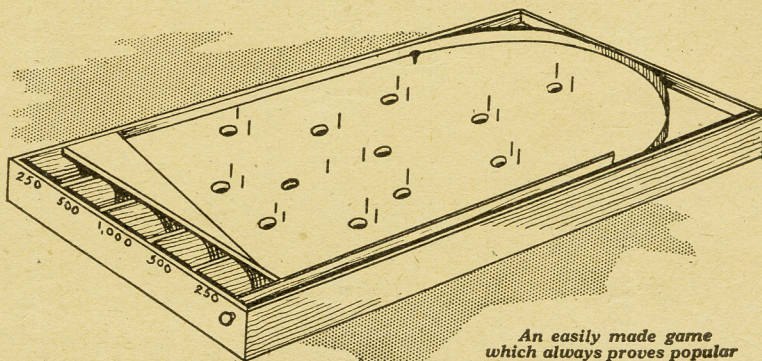
The holes drilled as indicated are $\frac{3}{4}$ in. in diameter and the smaller circles drawn on the plan represent pins added to increase the enjoyment and difficulties of the game. It will be observed that this top surface of the table is 26 $\frac{1}{2}$ ins. by 15 $\frac{1}{2}$ ins. with a neck of wood, 3 ins. long under the spring plunger, making one side of the panel 29 $\frac{1}{2}$ ins. long, this is clearly

indicated in the top view of the table.

The triangular strip of wood F, is 1 in. deep and 13 $\frac{3}{4}$ ins. long and at the wide end 1 $\frac{1}{2}$ ins. across. Its purpose is to guide any marbles not falling through the holes down into the compartment next to the spring plunger. This length of wood is tacked with panel pins to the top table.

The guide for marbles leaving their passage at the right of the board, is cut from an ordinary tin can straightened out and cut into two strips 1 in. wide. Each strip is attached to the sides of the table by small nails and bent into a curve with the ends meeting and pinned to the centre of the back board K.

This cannot, of course, be fitted



*An easily made game
which always proves popular*

until the rest of the framework is in place and the table erected. The length of lath, 1in. in height by $\frac{1}{4}$ in. in width, forms one side of the chute from which the marbles are shot, is fixed by panel pins driven through the top baseboard.

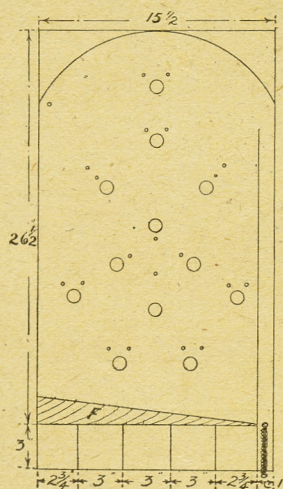


Fig. 2—Top of table with holes and pins

The plunger, which shoots the marbles around the table is simply made from a length of stiff wire, which after the whole table is put together is pushed through a hole drilled in the front end of the wood, marked J. A wooden knob is then added to each end and the wire bent at right angles as clearly shown at M.

If you happen to possess a coiled spring this is inserted before fitting

the inside wooden knob. If not, a length of spring wire, (thin model aircraft undercarriage wire), can be steadily twisted round and round a pencil until a spring is formed. This is easily done and the home made spring is fitted as stated such as shown in the side detail at Fig. 3.

A small cover strip of lath or tinplate just over the combined length of the spring and inside knob is

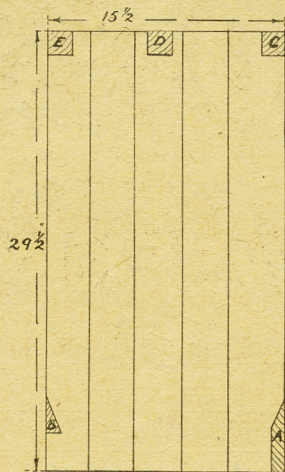


Fig. 4—Details of under frame

pinned to the top of both sides of the shooting passage in order to keep the spring and plunger steady when working.

The under panel of the table (Fig. 4) is made from thin planking or beaver board and has lengths of lath 1in. by $\frac{1}{4}$ in. mounted on edge down the entire length of the panel. These are the guides into which the marbles drop after falling through the holes in the

top panel and are lead by gravity down into the compartments at the front of the table.

The blocks of wood E, D, C, and the triangle B and piece A tacked to the top of the under panel are 1in. in depth, and are in turn pinned to the underside of the top panel, part A supporting the spring plunger. The compartments at the front of the table are thus automatically formed.

Completing the Work

The pieces of wood, two of H, and one each of part J and K are then

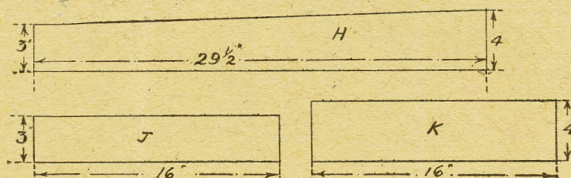


Fig. 1—Dimensions, and shape of ends and side pieces

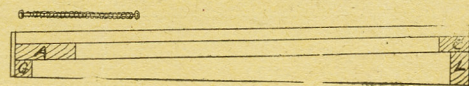


Fig. 3—Side elevation and detail of spring plunger

erected, the shorter ends overlapping the long sides which are panel-pinned and glued firmly together. The wooden strip L is 2ins. high and $15\frac{1}{2}$ ins. long and it is pinned to the inside of K as clearly shown, piece G is similar $15\frac{1}{2}$ ins. long by 1in. by 1in. and is tacked at the lower front of J as illustrated. The whole two panels are then lowered between the completed frame on to L and G and pinned.

The fascinating 15-Square Puzzle

HERE is a puzzle which only takes a short time to make, but will give quite a lot of fun to any young people you may have around. It is a very old one, but at the same time, one which is well worth making.

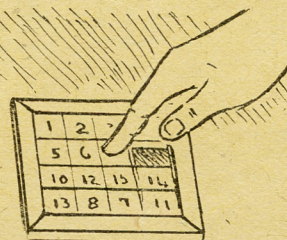
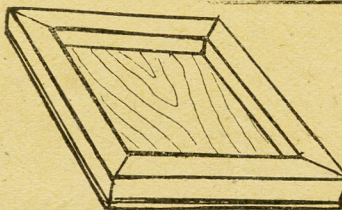
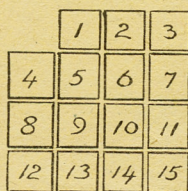
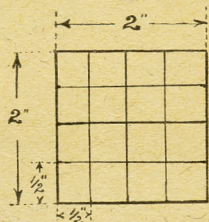
The puzzle consists of fifteen squares marked with numerals up to this figure. These are put in a frame in a jumbled state and the object is to get them into correct order by sliding them about, without lifting out.

To make—first cut a square of $\frac{1}{4}$ in. wood with 2in. sides. Mark each side off at the $\frac{1}{4}$ in. positions and rule lines across in both directions, which will give sixteen small squares. Now with paint (any handy colour) inscribe fifteen of them with consecutive numbers; the sixteenth square is not required.

Next cut along the lines, so dividing the squares. Use a fine fretsaw or tenon saw so that too much will not be lost at the cuts. Also do the cutting with precision so the squares will be the same size.

The frame is a base of any thin material $2\frac{1}{2}$ ins. by $2\frac{1}{2}$ ins., upon which are secured by short screws four $\frac{1}{4}$ in. by $\frac{1}{4}$ in. sides, mitred to meet at the ends. Fit two sides flush with the base edges, then put the squares in position and fit the other two sides round them, glasspapering away any of the base that may protrude.

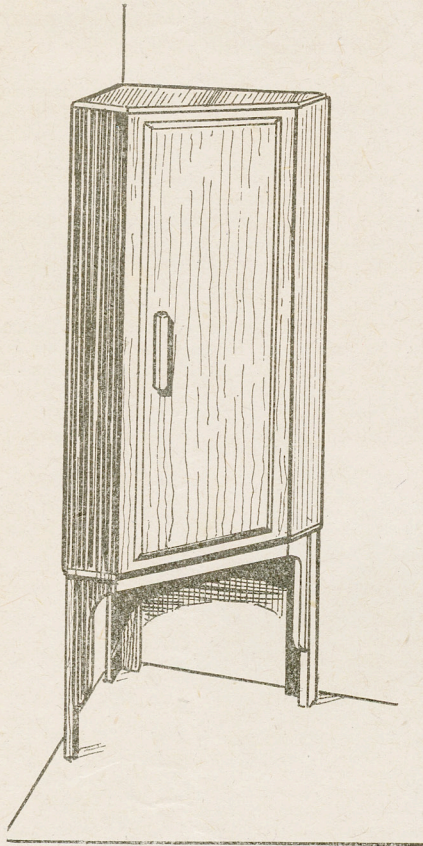
The puzzle is now complete, and though not hard to work out, is not quite as simple as it seems. Interest is maintained as the squares, being thrown in any way to start with, a new solution is needed each time.



Mark the wood like this Cut out fifteen squares Make a shallow tray to hold them

Your puzzle is complete

The home carpenter can easily undertake this simple UTILITY CORNER CABINET



THE corner design of cabinet has, much to recommend it nowadays as owing to the lesser quantity of show wood required it is most economical in scarce hardwoods. Apart from a small quantity of deal the only good wood required is a couple of fretwood panels 20ins. by 8ins. and $\frac{1}{2}$ in. thick, yet the cabinet is an article of furniture of moderate size and capacity.

Commencing Work

The back of the cabinet consists of two boards nailed together at right angles. These are shown in Fig. 1, A, and as will be seen, can be cut from a single board without jointing. The wood for these is $\frac{3}{4}$ in. deal which planed will be $\frac{1}{2}$ in. thick, quite stout enough for an article of this size.

The boards are cut to size given, one being the full width and the other $\frac{1}{2}$ in. less, in fact the two widths given at the top of the drawing. Draw pencil lines across where the bottom and shelf are to come, then nail the boards together at right angles, nailing the wider one to the shorter

one so that the two sides of the back will then be the same width.

The top, B, is set out on the board, $\frac{3}{4}$ in. deal like the back. Measure off the front, then at each end draw the faces of the side angles at 45 degrees. In the centre of the front draw a middle perpendicular line across the board and connect from there to the side angles. A 45 degree set square will be useful in setting out these parts.

Bottom and Shelf

The bottom and shelf are drawn similarly, but as they fit inside the back boards, and not on top, they are necessarily smaller by the thickness of the wood employed. The side angles then are $1\frac{1}{2}$ ins. instead of $2\frac{1}{2}$ ins.

In what will be the shelf, a strip $\frac{1}{2}$ in. wide is cut away from the front edge (see inset) to admit the door. The shelf and bottom are nailed in place, and the top of the cabinet nailed over. Nails that show, those in the top for example, are oval brads. and are punched well down, the holes being afterwards filled up level with stopping.

Fig. 2 shows a view of the construction. See that the edges of the shelf, etc. are level with those of the back, planing them a trifle where necessary. Cut two strips of wood, $\frac{1}{2}$ in. sq. and long enough to reach from the bottom of the cabinet to the top. These are shown at D and E.

Fix them in with nails, driven through top and bottom and one in the middle. Get them truly level with each other, 8ins. apart all the way, as they form the side framing for the door.

One of the fretwood panels is laid aside, it will be needed for the door. The other is sawn into strips, two 1in. wide and two $2\frac{1}{2}$ ins. wide for covering the front of the cabinet. Cut these rather full to allow for planing. Fig. 3 is a cross section through

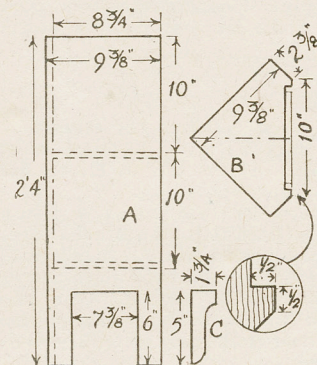


Fig. 1—Backboards and the top

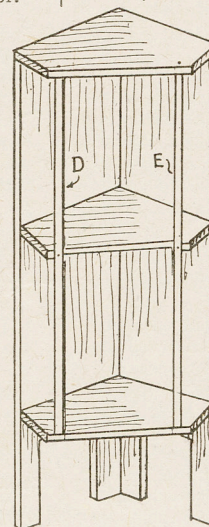


Fig. 2—Frame construction

part of the cabinet, showing these strips, the wider ones being lettered F and the narrower ones, G.

Fixing Strips

They are planed on their meeting edges to the angle given to butt closely together. The strips G should be planed to come level with the door framing (lettered H). A good fit resulting they are glued to the front of the cabinet, and nailed with panel pins or $\frac{3}{4}$ in. headless shoemakers' brads.

Nailing at top and bottom should be on a line $\frac{3}{4}$ in. from the edge so as to leave a clear $\frac{1}{4}$ in. for planing to a bevel afterwards. The front edges of top and bottom, not covered by the strips, should have $\frac{3}{4}$ in. wide strips cut for the purpose and be glued between to fill the space.

The Door

The door can now be made. A portion of this is shown in Fig. 4, from which it will be seen that it is composed of a panel of fretwood glued to a back frame of deal.

This frame is made up of $\frac{1}{2}$ in. by 1in. wood, and is put together with mitred corners like a picture frame. It could be halved together, but the cut ends of the joints look ugly. See the frame is square at the corners, then glue the joints, and lay aside until the glue is set hard.

In the meantime plane a bevel along the top and bottom edges of the cabinet, face side and angles only, not the back. Bevel down to $\frac{1}{4}$ in. only so as to clear the nails. This is important, as if the plane iron strikes a nail it may cause it to "notch" and

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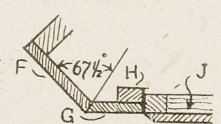


Fig. 3—Plan showing joint details

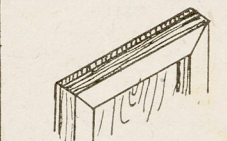


Fig. 4—The door parts

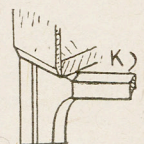


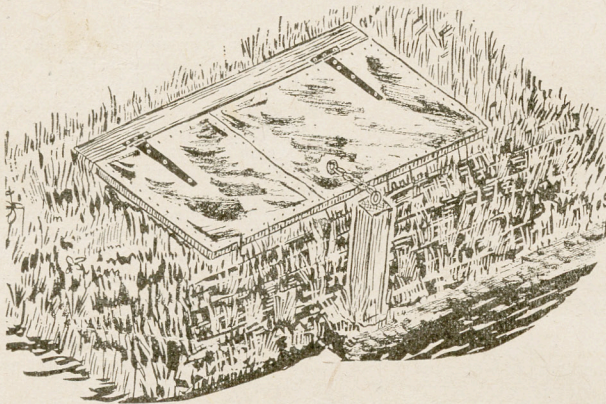
Fig. 5—Shaped corner brackets

A novel suggestion for a simple and safe GARDEN LOCKER

ON some allotments, huts are not allowed, and a familiar evening sight is to see gardeners carrying their spades and forks, etc., either strapped to their bikes or else in a towed truck. The reason, of course, is because there is no place on the allotment to leave them.

Well, why not make such a place and leave your tools there, saving all the bother of carrying them back and forth?

A feature of most allotments is a mound composed of turves which have been removed when the ground was first cleared. As a rule, such a mound is quite useless and unsightly. It is quite easy to build a locker into it, as can be seen by a glance at the illustrations.



Although, within reason, the locker can be of any size, it should be long enough to take your longest tool (say the rake) and deep enough to accommodate the tallest (say the watering can).

A Door Lid

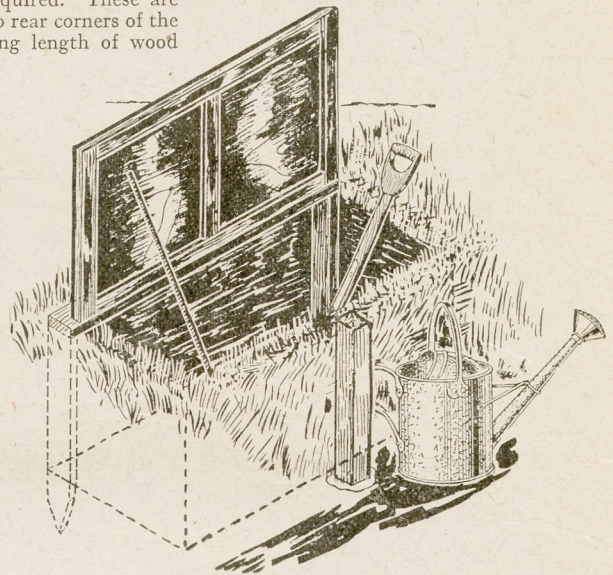
With this in mind, the rest depends on what sort of a lid you can get. Some builders' merchants sell second-hand doors. One can, of course, "knock up" a rough door from odds

and ends of wood. The door should, for preference, have a "style" down the centre.

At the rear of this door is a length of wood, three or more inches wide and not too thin. In length it is as long as, or perhaps a little longer than, the door. It is to this piece that the door is hinged with large strap hinges. It is not a bad plan to cover the top of the door with roofing felt if you have any. Otherwise creosote all wood-work thoroughly.

Holding Posts

Now dig a recess in your mound a few inches shorter each way, than the length and breadth of the lid. Two extra posts are required. These are driven into the two rear corners of the locker and the long length of wood



holding the door, is secured to them. When the lid is down it should rest on the edges of the earthen recess.

In this way you have a locker with earth walls thus saving a lot of timber, and as the bottom of this locker is roughly at about original ground level, the whole lot does not get water-

logged as do some tool chests sunk into the earth.

It is essential to provide a stout lock and chain and one way of fixing this is shown. At the front of the locker, outside, another post is driven (it would be better if you could set it in concrete). This has a large screw-eye driven in the top, and a corresponding screw-eye is fixed to the lid (hence the necessity of having a style down the middle). A chain is run through the eyes and a padlock used to secure the lid.

It is just as well not to call undue attention to your locker. The top could be covered with odd lumps of turf, etc.

The writer of this article has had such a locker for over a year and can vouch for its effectiveness.

Where new turf is being piled, it can, of course, be built into a hollow oblong which saves the trouble of digging out later.

Corner Cabinet—(Continued from previous page)

take a deal of grinding afterwards to make it smooth again.

The door frame should now be tried in place, and be trimmed up with the smoothing plane to ensure a good fit. It should then be hinged in place with a pair of 1½ in. brass butt hinges.

Remove the frame from the hinges and glue the fretwood panel to its face side. Leave under a weight until the glue is hard, then trim the edges level with the frame and plane a bevel all round. Refix the door, it

will stand out from the cabinet by the thickness of the fretwood, as at J, and relieve the otherwise flat appearance of the front.

A strip of wood ¾ in. sq. and 4 ins. long is glued to it for a handle. It is a good idea to face this handle with a piece of the fretwood glued over it to match the cabinet. Glue two wood stops inside the cabinet to keep the door from going in too far when closed.

Two under brackets are now cut from deal to size and shape shown at

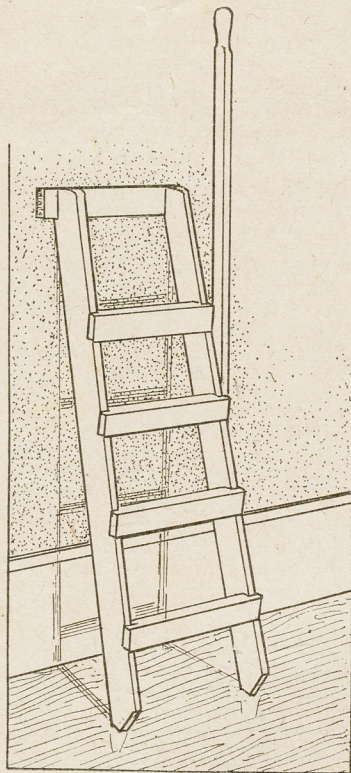
C, Fig. 1. The inner edges of these are bevelled to the same angle as the strips, i.e. 67½ degrees. They are then glued and nailed to the legs, just under the bottom of the cabinet, not level with the face edge of the legs but ¼ in. back.

Between these a strip of wood is glued across, as in detail K, Fig. 5. This finishes the woodwork, which is then glasspapered to smoothness.

The deal parts of the work should be stained to match the fretwood. Wax polish or clear varnish finish.

How to construct an economical and easily-made

HANDY LADDER



AS household steps take quite a lot of wood to make, why not build instead a short ladder for indoor use? It is easily carried about, being comparatively light in weight, and is almost, if not quite, as useful as steps for hanging pictures, arranging curtains, and a hundred and one other jobs that require to be done in the home.

A small but handy ladder is illustrated, which requires but little wood to make and is simple to construct. It will be noted here that four rungs, or steps, only are provided. This will probably be enough for rooms with average ceiling height.

If the house had lofty rooms, one or two additional rungs can be easily added if the sides are increased in length by 8ins. for each extra rung required.

Side Pieces

The sides are shown in Fig. 1 and are cut from 1in. by 3in. deal. Use wood free from knots and shakes. Cut to the total length and make a pencil mark every eight inches for the rungs. At these points a notch is cut out in which the rungs can "sit."

The best way to mark out these notches is to saw a $\frac{1}{2}$ in. thick slice off a

piece of 1in. by 2in. wood (the size of wood to be used for the rungs) and to place this against the marks as shown at A, and pencil round it. Taper off the bottom of the sides a little, not too much, and also the tops, for a distance down of 3ins. A wedge-shaped piece of 14 degrees is about the right amount to cut off.

Fig. 2 shows other parts of the ladder. Part B is a steadying handle, and can be cut from 1in. sq. deal, not less. Shape up the top to make a comfortable grip to the fingers. Part D shows the rungs, cut four, or whatever is required, from 1in. by 2in. deal.

Top Crossbar

Part C is a crossbar going across the top of the ladder and rests against the wall. Cut this from 1in. by 3in. wood and where shown by dotted lines cut grooves across, $\frac{1}{2}$ in. deep, in which the sides of the ladder can fit.

Now fix the sides to the crossbar and then nail the rungs firmly across in their notches, as shown in Figs. 3 and 4.

As the thickness of wood for the rungs does not provided quite a comfortable support for the feet, like the broader treads of steps do, the edge is thickened, as shown in Fig. 4. by nailing behind each rung a strip of 1in. sq. wood. Get each strip level with its rung.

A good plan would be to cut these strips to the correct length first, i.e. 10ins., and to nail them to their respective rungs before the latter are nailed in the notches. The edges of both can then be planed level before nailing in position.

The Treads .

Broader treads can be fitted instead of the rungs if desired, and may be preferred by ladies whose shoes are not so shaped as men's are to stand on a ladder.

The treads could be 3ins. wide, and either be fitted in grooves, $\frac{1}{2}$ in. deep, cut in the sides, or nailed to short

pieces of batten, the battens themselves being nailed to the sides for the treads to rest upon. Battens, or grooves, should be at an angle so that the treads are approximately level when the ladder is in use.

Get a bevel to 76 degrees to get the angle when marking out, and if grooves are cut they must not be more than $\frac{1}{4}$ in. or $\frac{1}{2}$ in. deep or the sides may be weakened.

The steadying handle is an addition worth adding. By providing something to grip hold of when mounted on the ladder a feeling of security is imparted. Readers know by experience how unsafe one can feel, even on a low ladder, without anything to steady oneself by.

Fixing the Handle

The handle is firmly fixed to the side of the ladder, at an acute angle, so that when the ladder is against the wall the handle will be practically vertical. Fix it with three screws and see it is secure.

The sharp corners of the top of the ladder and sides should now be chiselled off, and any roughness or splinters glasspapered to make it comfortable to handle and carry about.

The ladder can be left in the plain wood, but soon gets dirty in use. All wood does when not treated by a protective coating in some form. It is better to varnish it, or paint it, if either is available.

The cross board, C, which rests against the wall, should be covered on its back surface with some material to prevent the wood marking the wall in any way.

A piece of blanket stuff would do, or any soft material in fact. Two thicknesses would be advisable, and the ends should be turned over the edges all round and be tacked there as in detail, Fig. 3.

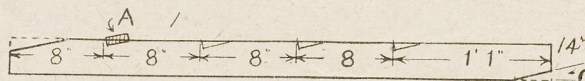


Fig. 1—Detail of the sides with relative position of treads

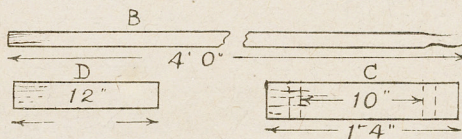


Fig. 2—Handhold part and details of crossbar and tread

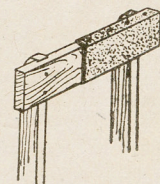


Fig. 3—Crossbar and covering

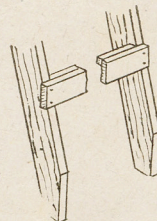
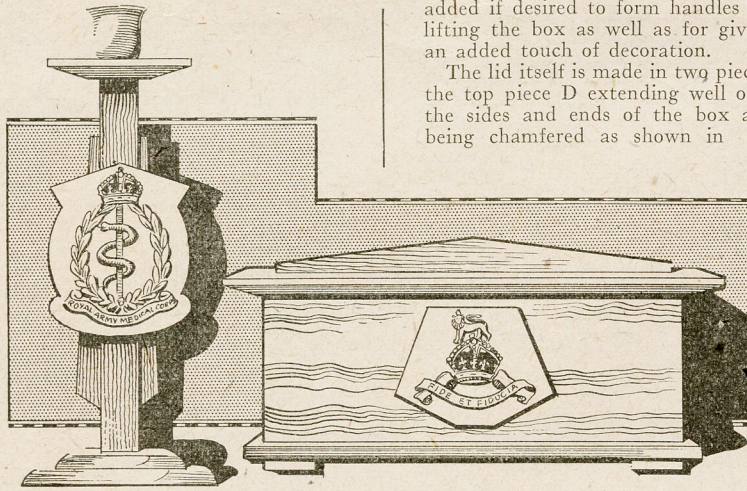


Fig. 4—The lower end shape

The Index to Vol. 96 is now ready.

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How to decorate your woodwork with Service BADGES AS OVERLAYS



THERE must be many workers who would like to incorporate their army badges into some household article as a decorative motif. This short article is going to tell how to make two useful articles, and suggest how they may be suitably decorated. One article is the ever popular dressing table box which can be used for a hundred and one things by the ladies. The other is for a pair of candlesticks which may be used at either end of the mantel piece.

Box Construction

In Fig. 1 the construction of the box is seen, and at the end of this article a cutting list is given from which the number and sizes of all the pieces may be got.

The sides and ends of the box are simply butted together and glued, and after the floor has been put on, some quarter-round beading may be glued round inside to strengthen the parts.

It should be mentioned that the shaped "ears" on the ends B may be

added if desired to form handles for lifting the box as well as for giving an added touch of decoration.

The lid itself is made in two pieces, the top piece D extending well over the sides and ends of the box and being chamfered as shown in the

sketch if desired. The under piece E, which is glued centrally to D, keeps the lid properly in place when it is on. This piece E therefore wants to fit just loosely between the sides and ends of the box.

A simple handle is glued along the centre of the lid and held further by two screws put through from the underside. To this box there is a simple overlay, and in Fig. 2 a suitable outline is given for it.

It should be cut from thin wood and the particular military or other badge is either put on in transfer form or it may be outlined in pencil and coloured in enamels or even water colours.

Contrast in colours of wood should be aimed at, and if the box is made of mahogany then it should be stained to a rich dark red and the overlay be of either white or yellow tint such as a maple wood or satin wood. Colour in almost any form takes well to these two varieties of wood.

For the candlesticks we should again suggest woods of contrasting colour, and they may in this respect be made to match the woods of the box just completed.

The general construction of the stick is shown in Fig. 3. It should be mentioned that as the main upright H is square in section, the twoside "ears" J should

be glued flush with the front face, then the badge overlay must be glued to all three pieces to make a firm piece of work. The two base members F and G are shaped to a "thumb" mould on their top edges, this work being done with a rasp and file and finished with coarse and fine glasspaper.

It must be observed also that the foot of the upright goes into each base member and is glued firmly. The top member I can be fixed with the screw which is attached to the bottom of the metal candle socket.

Another Type

In Fig. 4 we suggest a shape suitable for a badge which is more or less upright in design. Should the particular badge required be square or of a shape as suggested for the box, then the overlay wood of the candlestick may be made to suit, and may be as that shown in Fig. 2.

The cutting list of parts will be found useful when setting out the work ready for cutting and shaping.

Set out the parts as shown directly onto the wood taking care to have accuracy in the measurements and in the rightangles at all corners.

CUTTING LIST

The Box

- A—2—8ins. by 2½ins. by ½in.
- B—2—3½ins. by 2½ins. by ½in.
- C—1—8ins. by 4ins. by ½in.
- D—1—8ins. by 4ins. by ½in.
- E—1—7ins. by 3ins. by ½in.
- Ears—1—2½ins. by ½in. by ½in.
- Handle—1—7ins. by ½in. by ½in.
- Foot—2—4½ins. by ½in. by ½in.
- Overlay—1—3ins. by 2½ins. by ½in.

The Candlestick

- F—1—3½ins. by 2½ins. by ½in.
- G—1—2½ins. by ½in. by ½in.
- H—1—7ins. by ½in. by ½in.
- I—1—2½ins. by 2ins. by ½in.
- J—2—5ins. by ½in. by ½in.
- Overlay—3ins. by 2½ins. by ½in.

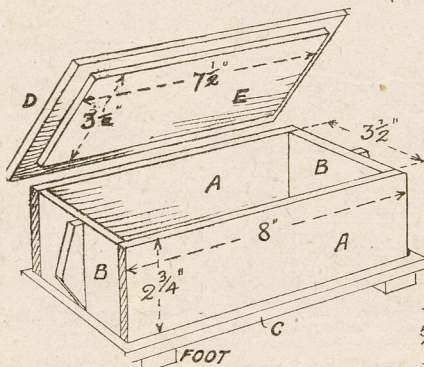


Fig. 1—A simple box to make

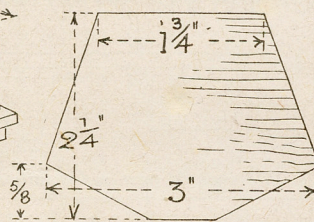


Fig. 2—A back shield shape

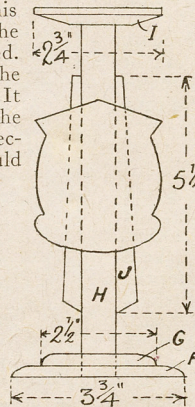


Fig. 3—Candleholder

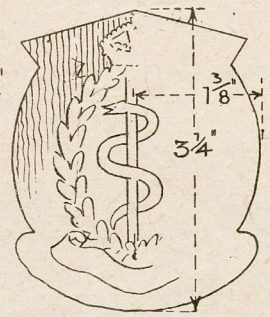


Fig. 4—Another simple shape

Enamel ware, Shovels and Steps are dealt with in these HOUSEHOLD REPAIRS

TO mend a small leak in enamelware, such as pie dishes, jugs, saucepans, soap dishes, etc., it is only necessary to enlarge the hole to about $\frac{1}{16}$ in. with a drill, following which a copper, or aluminium rivet is pushed through the hole to project slightly at the underside of the utensil. The stem is merely hammered flat (on the outside please note) so the rivet spreads and thus effectively seals the hole.

This method of repairing utensils is particularly ideal for cooking utensils or those used for food. The more stereotyped, old-fashioned method of using discs of tin, cork and small bolts and nuts should be confined to basins, buckets, zinc baths.

Chipping Danger

When drilling the rivet (or bolt) holes, remember that enamel chips very easily. It is advisable to work slowly and not exert too much pressure. To be on the safe side, do the drilling from the inside of the work, because if you suddenly break through, the chipping—if any—will be mainly at the outside where it will not be seen.

An alternative plan, of course, is to seal the leak with soft solder. This if applied, is done on the exterior; a better job will result if the underside is bare of enamel.

COAL shovels, after a time in use, become bent and battered at the edge through contact against hard lumps of coal. Such an edge makes it difficult to use the shovel properly and the obvious remedy is to flatten out the bends and dents by hammering, with the mouth of the shovel supported on a flat tile or bar of metal.

Cut and Trim

Then the time arrives when the shovel mouth is worn thin and broken and curled in places. The only remedy, in this case, is to recondition the edge by cutting off the offending portion with a cold chisel, afterwards trimming with a file or by means of a grindstone.

This results in a brand new form of shovel, the mouth being quite straight and somewhat stronger; a coal shovel repaired, or rather, reconditioned, in this manner will last for many more years in use.

If you possess household steps having cord struts, these should be replaced at the first signs of fraying. With so many painting jobs about the house these days, the steps will

be used more than ever, and naturally, they must be in a good condition—safe, in other words.

A wooden strut between the frames, if loose, should be replaced by a new one with a tenon cut big enough to ensure a tight fit. Small wedges can be glued and driven in to tighten the tenon in its mortise, but care must be exercised to avoid splitting the surrounding wood, as this would make the steps more precarious than they ever were.

Watch the Hinges

Have a look at the hinges. If loose, do not think of using longer

screws, as these are liable—in the long run—to cut the wood to pieces.

If the hinges cannot be shifted to a new, convenient position, the best plan is to let a new batten into the frame and refit the hinges to it. A far better, more satisfactory, job will be your reward.

If there is any sign of looseness or damage on the treads themselves, repair them immediately. Inattention to this may mean a nasty fall or an unwanted accident.

A corner metal angle plate, such as used for supporting shelves, can be used. Screw it firmly to the inner side of upright and under the tread.

ALPHABETICAL HINTS

BRAKE blocks for bicycles are, on account of the shortage of rubber, hard to get and, as a result, are more expensive than they used to be. Here, then, is a worth-while money-saving suggestion: why not make the blocks from wood?

Silly? Well, if made from soft wood, such as deal—yes. If made from a tough wood, such as birch or holly—no. A real hard piece of wood, correctly shaped and fitted to the brake holder, will withstand a lot of rough usage and wear. It will be even more lasting if cut short-grained. However, a straight-grained brake block gives good service.

New Blocks

To make and fit it to the metal holder, remove the old, worn rubber blocks (by means of a screwdriver). The blocks are then shaped from the wood, a slightly wedged-shaped of dovetail being cut along the underside, as shown.

Before tapping the wooden blocks into the holders, notice how the tops of the blocks need to be cut at a slight bevel. This is done to conform with their position on the sides of the wheel rims. The metal holder, and the corresponding brake block, as depicted, belongs, of course, to a brake; the idea can also apply to respect to the old-fashioned brakes which draw up against the inner rim of the wheels.

The Right Side

Now, the metal brake block holder shown is a left hand side holder. When therefore, you replace the holder on the callipers, be sure to keep them at their respective sides. The reason for bringing up the point is that the

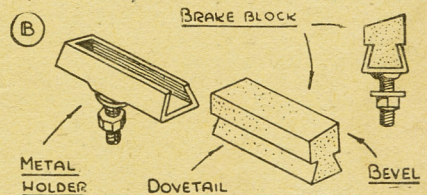
“blind” end of the holders will keep the blocks from being forced forward and thus be pushed out from the holders by the movement of the wheel.

**B FOR
BRAKES**

Dovetail Fit

If the end-grained blocks are made, cut the dovetail and fit it on the holder prior to cutting it away from the length of wood used. This not only simplifies the work of cutting the dovetail, but it also prevents any likelihood of splitting the block if forced on after being cut.

As an extra precaution against the blocks working loose, the groove in the holders could be smeared with rubber glue (solution) or with paint,



following which the blocks are forced in. Wooden brake blocks do not tend to squeak so much as tough rubber blocks, but in any case, they could be saturated, a trifle, with linseed oil, or any kind available.

Such blocks get one out of a difficulty. They ensure more safety on roads, for there is no more dangerous thing as badly-working brakes caused by worn blocks. Incidentally, if you have thick pieces of rubber, such as that provided by an old car tyre or rubber heels, rubber blocks could be made and fitted.

Some items of interest and instruction from the EDITOR'S NOTEBOOK

SOMEbody has found a new source of supply of wood. It comes from the sea to them! A reader in the services stationed on a certain part of the coast wrote for patterns of ships. He didn't want any wood, he said, because "the sea yields its crop." Strange to think the flotsam from some unfortunate boat probably wrecked hundreds of miles away, serves to keep some coast watcher or gunner happy in his spare time!

HOBBIES Weekly certainly does find its way about, and I imagine its distribution must be in almost all parts of the available world, and as our Fighting Forces release further countries from bondage, so Hobbies is in demand. It was not long, for instance, after Etheopia was freed that the British Consul asked me to send Hobbies each week to the Legation at Addis Ababa, where, no doubt it is doing excellent work in providing suggestions for our British administrators.

THERE'S no telling where a hobby is likely to break out is there? Strange places, strange people, strange customs cannot prevent it. Look at the L.A.C. in North Africa—W. B. Martin of Sneinton Dale, Notts.—who made a collection of beer bottle labels. He at least got variety, for the picture I saw of them showed several different languages and countries of origin. Of course, his hobby was always a good excuse in trying to track down a new bottle!

DO you realise what a hobby means to a prisoner of war when he can get the necessary material? I am afraid we really cannot appreciate the value of being able to do something when and where we like in our spare time. If we did, perhaps we would not grumble when we cannot buy all the fretsaw blades we want but be thankful some of those blades were being despatched by the Red Cross Society to keep our fellows' spirits up in their monotonous routine of their daily round and common task. Read part of this letter which came from an R.A.M.C. doctor at one of the camps—they had not received their fretsaw blades then. "I often wish those at home" wrote the Major, "could see some of the efforts. Red Cross string, is transformed into doormats, coconut matting, floor brushes, hand brushes, fire brushes, slipper roller shaving brushes, etc. The packings and wooden chests, with odd pieces of cloth,

make excellent armchairs. Wool rug making and other weaving, as supplies permit, is expertly carried out. Hints on the use of crepe paper would be helpful for so far we have only achieved some rather amateurish roses and daffodils. Pictures of various flowers would be most welcome." Think over these facts, some of you grumblers, and you will not complain again!

OVER seven hundred examples of work by Ulster's Civil Defence workers, made in their spare time, was on view at a recent Exhibition at the Museum and Art Gallery, Stranmillis, Belfast. The various exhibits, apart from showing ingenuity, patience and care of detail, also served to show how "tastes" can run in the matter of hobbies.

Amongst the major attractions, such as dolls' houses, complete with lights, etc., and a fine piece of workmanship in the form of a realistic toy gipsy caravan, there was a variety of soft dolls and animals, both realistic and grotesque in appearance.

In the furniture section, men produced tables, chairs and stools on neat, comfortable lines. An interesting article was a tea trolley, with detachable trays and a folding flap. This fine piece of work, incidentally, was constructed by a female member of the Civil Defence.

To balance matters, however, an N.F.S. man had two hand-painted exquisite cushion covers on view. Most of the embroidered cushions and cloths, needlework pictures and tapestry was, as in nearly all exhibitions of this nature, the work of women.

Rugs, of course, featured in the needlework section. One woman made a rug by dyeing odd scraps of material

and cutting them into suitable-sized strips, these being used in place of ordinary rug-making wool. The finished rug had a neat, colourful design—better, indeed, than one could obtain with wool, whilst the "feel" was just as soft and as comfortable.

LOCAL exhibitions of this kind are always worth attending, if possible. One can usually pick up excellent hints and tips, see how others go about design and finish, materials used, etc., etc. Only in this way can one know what to avoid and use in conjunction with similar articles that one may be considering.

HOW many readers, I wonder noticed that the victorious Allied armies marched through Gesso when they swept close to Messina. Most of us, I expect only new Gesso as the pastime composition which was largely popular at one time in modelling as a decoration clay. It was really mainly composed of plaster of paris and obtainable in bright and varied colours.

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